

A. Removing oil

- 1 Drain all of coolant.
- 2 Remove thermostat and set heater lever or temperature dials to warm.
- 3 Fill cooling system with a 5 % solution of water and neutral cleaner or with an alkaline cleaner such as P 3-Croni (supplier: Henkel or Grisiron 7220 (supplier: Farbwerke Hoechst).

Attention!

On these vehicles (**light alloy cylinder head and light alloy radiator**) do not use heavily alkaline cleaner such as P 3-Standard (supplier: Henkel).

- 4 Run engine warm at medium speed until at about 80 °C (176 °F) and hold at this temperature for about 5 minutes.
- 5 Switch off engine and let cooling system cool down to about 50 °C (122 °F).
- 6 Drain entire solution.
- 7 Flush cooling system twice immediately afterwards with clear water, run engine warm (about 5 minutes) and drain.

B. Deliming and removing rust

Attention!

The cooling system must be removed of oil before deliming, even if there is no visible indication of oil.

- 1 After flushing the cooling system for the 2nd time during oil removing operations fill cooling system with a 10 % (100 g/l) solution of water and citric, tartaric or oxalic acid (supplied by chemical companies), whereby the citric acid should be preferred.

2 Run engine warm at medium speed until at about 80°C (176°F) and hold at this temperature for about 10 minutes.

3 Switch off engine and let coolant cool down to about 50°C (122°F).

4 Drain all of deliming solution.

5 Flush cooling system with clear water at least three times, running the engine for 5 minutes after each flushing action.

It might be necessary to repeat this treatment for a seriously limed cooling system. This would mean using a fresh batch of deliming solution and repeating the flushing operations.

6 Install thermostat with a new seal.

7 Add specified coolant to cooling system (service product specifications on pages 310–325).

Note: Commercial products, which consist of the above mentioned acids, can also be used for deliming and removing rust.

Chromic acids or products containing chromic acids must not be used to prevent contamination of sewage systems.